

S/068/60/000/012/001/005
E071/E435

An Increase in the Yield of Coke-Oven By-Products by the Pyrolysis of Heavy Petroleum Oils in Coke Ovens

the blend was done by 6 disc ploughs placed under the conveyor. The composition and properties of the coal blend prior to and during the experimental periods are given in Table 1 (moisture 10%, volatile matter 26 to 27%, - 3 mm fraction 89 to 90%). The increase in the bulk density of the charge (from 740 to 751 kg/m³) required higher flue temperatures, these were increased (by 10°C) insufficiently due to the poor state of the ovens: Mechanical properties of coke (Table 2) remained practically the same. There was some increase in the proportion of large fractions (above 60 mm) and in the volatile content of coke. The content of benzole in raw gas increased from 40.3 g/m³ to 46.1 g/m³ and with a uniform addition of oil of 2 to 2.5% to 48 to 50 g/m³. The composition of scrubbed gas remained practically the same (Table 3) but its daily output increased from 1232 to 1286 thousand nm³ (4.4%). Specific gravity of tar decreased by 0.017 and the yield of its light fraction increased by 0.4%. The composition of tar from primary condensers somewhat changed: its specific gravity

Card 4/ 5

S/068/60/000/012/001/005
E071/E435

An Increase in the Yield of Coke-Oven By-Products by the Pyrolysis of Heavy Petroleum Oils in Coke Ovens

increased by 0.015 and the yield of light fractions decreased by 0.9%. Washing losses of benzole increased by 0.47%, its specific gravity decreased from 0.875 to 0.872; the content of the benzole fraction decreased from 68.33 to 67.35%; the content of toluol increased from 15.06 to 15.83%. 9.22% of the fuel oil added to coal was transferred into raw benzole, 37.2% into gas and 16.04% into tar. It is concluded that in order to increase the output of gas, benzole and tar additions of fuel oil to coal are recommended. The proportion of fuel oil which can be added should be established for each individual works. The following participated in the work: V.Ya.Tsepurit, A.V.Shepel', F.A.Pilyasov, L.A.Vashchenko, S.D.Brodskiy, M.I.El'yashev, G.S.Iskra, Ya.D.Semisalov, S.P.Kalганov, I.I.Mikhaylov, M.T.Petrenko, and A.Ya.Val'skiy. There are 3 tables and 1 Soviet reference. ✓

ASSOCIATIONS: UKhIN Litvinenko, M.S., Tyutyunnikov, Yu.B., Vershina, S.V.;
Gorlovskiy koksokhimicheskiy zavod (Gorlovka Coking Works)
Card 5/5 Dariyenko, V.I., Vorob'yev, D.D., Tkachenko, N.A.

SEKT, P.Yo.; TESLENKO, F.F.; GAYOVY, A.A.; GIMEL'SHTEYN, T.Ye.; YEGOROV,
K.N.; LITVINENKO, M.S.

Revision of the existing prices of coke chemicals and coke-oven gas.
Koks i khim. no.2:47-50 '61. (MIRA 14:2)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut (for Sekt, Teslenko).
2. Giprokoks (for Gayovoy, Gimel'shteyn, Yegorov). 3. Khar'kovskiy
nauchno-issledovatel'skiy uglekhimicheskiy institut (for Litvinenko).
(Coke industry--By-products) (Chemicals--Prices)
(Coke-oven gas--Prices)

LITVINENKO, Mikhail Semenovich; NOSALEVICH, Ivan Mikhaylovich; FOSS,
E.I., otv. red.; LIBERMAN, S.S., red. izd-va; ANDREYEV, S.P.,
tekhn. red.

[Coke-plant chemicals for the production of polymerials] Khimicheskie produkty koksovaniia dlia proizvodstva polimernykh materialov. Khar'kov, Metallurgizdat, 1962. 428 p.

(MIRA 15:4)

(Coke industry--By-products) (Polymers)

LITVINENKO, M.S.; TYUTYUNNIKOV, Yu.B.; SHEPEL', A.V.

Remarks concerning G.P.Govoroi's letter. Koks i khim. no.11:58-60
'61. (MIRA 15:1)

1. Ukrainskiy uglekhimicheskiy institut.
(Coke-oven gas)

LITVINENKO, M.S.; KHVAT, M.B.; BRODOVICH, A.I.; PERTSEVA, N.Ya.;
PERMAN, N.M.; Priniimali uchastiye: LOPATINSKIY, D.K.; AGARKOVA, V.I.;
SAMOKHVALOVA, N.N.; KRONIK, I.L.

Obtaining sodium thiocyanate for the manufacture of nitron fibers.
Koks i khim. no.6:34-40 '63. (MIRA 16:9)

1. Ukrainskiy uglekhimicheskiy institut (for Litvinenko, Khvat,
Brodovich, Kronik, Pertseva). 2. Khar'kovskiy koksokhimicheskiy
zavod (for Perman).
(Textile fibers, Synthetic) (Sodium thiocyanate)

LIT V. I. N. S. N. K. S. N.

5(10); 2(10) PULSE I BOOK EXPLOITATION 807/2210

Atomnaya energiya v aviatsii i raketyakh tekhnika; sbornik statey (Atomic Energy in Aviation and Rocket Engineering). Collection of Articles. Moscow, Voen. izd. M.-V. obor. SSSR, 1959. 500 p. (Series: Nauchno-populyarnaya biblioteka) No. of copies printed not given.

Ed. - Compiler: P. P. Astashenkov, Engineer, Lt.-Col.; Ed.: Ya. M. Kader, Tech. Ed.: A. M. Gavrilova.

REMARKS: This book is intended for officers of the Soviet Armed Forces, members of POSAP, and the general reader interested in the uses of atomic energy and in the development of aviation and rocket engineering.

CONTENTS: This collection of 46 articles, compiled by 26 Soviet scientists and based chiefly on non-Soviet materials, discusses various aspects of the use of atomic energy in rocketry and aviation. The book surveys the development of atomic and thermonuclear weapons and weapon carriers, lays down the principles of anti-atomic defense, and evaluates the application of nuclear energy in aviation and rocketry. Fuel and construction materials, as well as actual physical and technical processes involved, are treated briefly. Fundamental aspects of atomic warfare and combat tactics are discussed at length. The book is divided into four parts, of which the last consists chiefly of anti-Western propaganda. Section I is devoted to nuclear weapons and their use in aviation. Section II is on anti-atomic defense, especially the defense against contamination of airfields and aircraft, and defense against radiation. Section III is on the use of flight technology in modern aircraft and rocket technology. Section IV discusses, including some speculations on space travel and on the energy of the future. There are 126 figures and 35 non-Soviet references (some in Russian translation).

TABLE OF CONTENTS:

Defense Against Radiation	255
Zhilov, B. [Engineer-Captain]. Harmful Effects of Penetrating Radiation from Atomic Explosions and Protective Measures at Airfields	260
Khramov, B. [Candidate of Technical Sciences, Engineer-Lt. Colonel]. Flying in the Cloud of an Atomic Explosion	266
Litvinenko, M. Behavior of Air Personnel When the Airfield and Equipment Have Been Contaminated Through Radiation	275
Ardenkin, S. [Engineer-Lt. Colonel]. Field Radiation Monitoring Instruments and Their Basic Elements and Quality Coefficients	284
Kasov, A. Development of the Techniques of Radiation Survey and Radiation Monitoring	291
Syrmaz, V. [Candidate of Technical Sciences, Engineer-Lt. Colonel]. Aerial Radiation Survey	299
Rubkov, B. [Engineer-Lt. Colonel]. Decontamination of Aircraft	309

Card 6/9

S/032/60/026/011/026/035
B004/B067

AUTHORS: Kukhtevich, G. M. and Litvinenko, N. A.

TITLE: Electroinduction Thickness Gage¹⁴

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 11, pp. 1304-1306

TEXT: Ultrasonic thickness measurements of pipe walls by means of a B4-8P (V4-8R) apparatus require a complicated preliminary treatment of the specimen surface. Therefore, an electroinduction thickness gage was constructed which makes it possible to measure the wall thickness of austenitic 6 - 15 mm-steel pipes. The apparatus consists of an audio-frequency generator, an amplifier, a phase detector, and a separator. The generator operates with 550 - 3500 cps, 4 w, according to the thickness of the wall. The specimen is placed before the first pickup and the standard before the second. The primary windings of the pickup are connected in parallel and the secondary windings in the opposite direction. As long as the specimen complies with the standard, the emf in the secondary windings is equal to zero. With different values of specimen and standard, the emf produced in the secondary winding is increased. An instrument indicates the difference, ✓

Card 1/2

Electroinduction Thickness Gage

S/032/60/026/011/026/035
B004/B067

an automatic device stops the transport of the specimens, and switches on a signal lamp. The apparatus was tested at the Yuzhnotrubby zavod (Southern Pipes Plant) with austenitic steel pipes which, with the aid of a ferritometer, had been previously examined for the disturbing alpha phase. It is planned to combine the thickness gage with a ferritometer designed at the Institut elektrosvarki im. Ye. O. Patona AN USSR (Electric Welding Institute imeni Ye. O. Paton of the AS UkrSSR) which eliminates the pipes containing the alpha phase at once. There are 2 figures:

ASSOCIATION: Ukrainskiy nauchno-issledovatel'nyy trubnyy institut
(Ukrainian Scientific Research Institute of Pipes)

Card 2/2

24184

1.5000

9.6000

S/118/61/000/006/001/002
D/204/D306

AUTHORS: Kukhtevich, G.M., Litvinenko, N.A. and
Russkevich, Yu. N., Engineers

TITLE: Automatic checking of pipes

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva,
no. 6, 1961, 21-23

TEXT: The Ukrainskiy nauchnoissledovatel'skiy trubnyy institut (Ukrainian Scientific Research Pipe Institute) has developed an apparatus for automatically checking the wall thickness of pipes during production. It consists of a thickness gauge and an automatic checking block. The thickness gauge is based on the Eddy current and can detect differences of wall thickness of a pipe round its perimeter and along its length. It has a short time lag which is important when the signal caused by a difference in wall thickness is short and when it is necessary to transmit it quickly to a recording mechanism. Its recording mechanism can be

Card 1/4

24184

S/118/61/000/006/001/002
D204/D306

Automatic checking of pipes

used as a part of the thickness gauge for checking the pipes manufactured from a non-magnetic material. A standard pipe made from the same material as the measured one is used by this apparatus for detecting the difference in wall thickness. This thickness gauge indicates the difference in wall thickness by means of a mid-scale zero ammeter calibrated in microns and connected to a finger type detector. The automatic checking block switches off the engine moving the pipe into the gauge by means of the light signal when the deviation from the wall thickness is bigger than the given tolerances. Since the thickness gauge detects the positive and negative sign of deviation of the wall thickness then the automatic block circuit has two pulse height discriminators, each of which is designed for emitting the signal of specific polarity. The circuit can be adjusted for different values of the threshold voltage for each discriminator. Potentiometers R_{10} and R_{21} are used for signal limitation by means of a discriminating voltage. Pulse

Card 2/4

24184

S/118/61/000/006/001/002
D204/D306

Automatic checking of pipes

height discriminators are tuned on crystal diodes D_1 , D_2 , D_3 and D_4 . To express clearly the threshold of discrimination the operating point should be on the rectilinear portion of the diode characteristic, and direct current amplifiers in the form of semiconductor triodes Π_1 and Π_2 are connected before the discriminator.

The bigger the coefficient of cascade amplification, the shorter the signal and smaller the accuracy of the automatic block. For this automatic block, the accuracy is 2-3%. The source of supply should be stabilized to keep the magnitude of the threshold voltage and the amplifier supply voltage constant. The lamp L_3 , Fig. 1

indicates the supply voltage to the thickness gauge. When the deviation from the wall thickness is bigger than the given tolerances, the polarized relay P_1 is actuated and closes the corresponding circuit of signal lamp L_1 or L_2 . Simultaneously, the

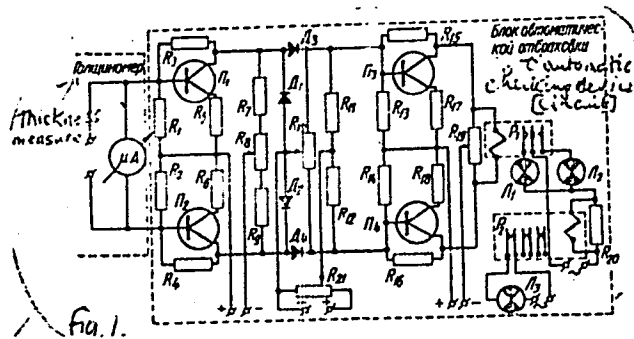
Card 3/4

24184

S/118/61/000/006/001/002
D204/D306

Automatic checking of pipes

actuated relay P_2 switches off the drive mechanism of the pipes.
The apparatus gave good results. There are 2 figures.



Card 4/4

KUKHTEVICH, G.M.; LITVINENKO, N.A.; AMELINA, L.S.

Special features of the magnetic testing of thin coatings on
bimetallic materials. Zav.lab. 28 no.1:71-72 '62.

(MIRA 15:2)

1. Ukrainskiy nauchno-issledovatel'skiy trubnyy institut.
(laminated metals)
(Magnetic testing)

LITVINENKO, N.A.

Attention should be paid to working conditions in telecommuni-
cation enterprises. Vest. svyazi 23 no.8:17 Ag '63.
(MIRA 16:11)

1. Starshiy ekonomist Morozovskogo uzla svyazi Rostovskoy-
na-Donu oblasti.

ZHOS, I. D. and LITVINENKO, N. A. (Veterinary Doctors, Starobel'sk Veterinary Hospital, Lugansk Oblast').

"Use of biostimulgin [biostimul'gin] for sterility in cows"...

Veterinariya, vol. 39, no. 8, August 1962 pp. 51

VASSEFMAN, B.Ya.; LITVINENKO, N.I.

Geological structure and oil occurrences of the Pashnya oil field.
Neftegaz. geol. i geofiz. no.11:3-6 '65. (MIRA 18:12)

1. Trest "Voyvozhneftegazrazvedka" i Ukhtinskoye territorial'noye
geologicheskoye upravleniye.

LITVINENKO, N.M.; PICHKA, A.A.

Stand for testing mooring devices. Ogneupory 22 no.3:127-
128 '57.

(MLRA 10:5)

(Cables--Testing)

LITVINENKO, N.M.; LOZOVSKIY, A.V., inzh.

Proportioning by weight at the Karl Marx Refractories Plant in
Panteleymonovka. Ogneupory 19 no. 3:138-139 '54. (MIRA 11:8)
(Panteleymonovka--Refractories industry)

LITVINENKO, N.M.; SHIBAYEV, Yu.V.

Some rare birds of the southern Maritime Territory. Ornithologia
no.7:115-121 '65. (MIRA 18:10)

LITVINENKO, N.M.; NAZARENKO, A.A.

~~on the basis of the results of the investigation~~

New findings of the painted snipe *Rostratula benghalensis benghalensis* in the Southern Maritime Territory. Dokl. 1981, no. Dal'. Vost. no.1:137-138 '83. (1983, 1987)

1. Zapovednik "Kedrovaya pad'" Dal'nostochechnogo filiala Sibirskogo otdeleniya AN SSSR.

VINOKUR, S.B.; LITVINENKO, N.M.

Manufacture of steel-pouring magnesite nozzles. Ogneupory 25 no.10:
440-442 '60. (MIRA 13:10)

1. Panteleymonovskiy zavod im. K.Marksa.
(Steelworks--Equipment and supplies)

KUKHTEVICH, G.M., inzh.; LITVINENKO, N.A., inzh.; RUSSKEVICH, Yu. N., inzh.

Automatic inspection of pipes. Mekh.i avtom. proizv. 15 no.6:21-23
Je '61. (MIRA 14:6)

(Electronic control) (Pipe—Testing)

1.8000

31851

S/032/62/028/001/009/017

B124/B138

AUTHORS: Kukhtevich, G. M., Litvinenko, N. A., and Amelina, L. S.

TITLE: Features of the magnetic testing of thin bimetallic coatings

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 1, 1962, 71 - 72

TEXT: The magnetic flaw detector (Fig.) described in this paper is based on the magnetic suspension method, and is used to test a soft-magnetic metal coating 40 to 100 μ thick, applied to nonmagnetic steel by hot rolling. The device consists of d. c. operated electromagnets 1 and 2 each composed of two cores and having a common shaft 3 which is fixed to test table 4, BSA (VSA)-type rectifier 5 with a rectified voltage of 24 v, container 6 capacity ~15 liters, equipped with a pump, special supply duct 7, illuminator, and flexible rubber hoses for circulating the suspension. The electromagnet coils have 1700 turns of the wire ПЭЛ (PEL), 1 mm in diameter, and are contained in an aluminum housing. The current in the coil was controlled with an ferro-resonance voltage controller. Products are tested in a magnetic field of 70 to 80 oe. The suspension is pumped to the test article, passes round it and is returned to container 6 through connecting pipes and an outlet in the test table. The Card 1/2

Features of the magnetic...

S/032/62/028/001/009/017
B124/B138

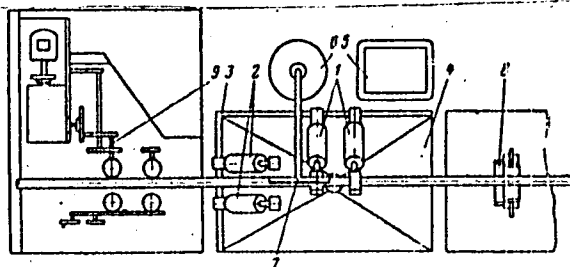
test specimen is attached to the test table with holder 8; the test articles are either brought to the test table by hand or by device 9. Experience has shown that if the sensitivity of the device is so high that scratches 10 - 15 μ deep can be detected, "imaginary" defects would be recorded. With a coating up to 50 μ thick, bands of the precipitated suspension form in the case of defects, and disappear again when the sensitivity of the leak detector is lowered. The maximum sensitivity for a flaw detector used on magnetic metals 30 to 50 μ thick is a depth of 20 μ . There is 1 figure.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy trubnyy institut
(Ukrainian Scientific Research Institute of Tubes)

Fig. Magnetic flaw detector.

Fig.

Card 2/2



LITVINENKO, N.M.; SOLOV'YEVA, M.Ye.

Modernization of a revolving press. Ogneupory 27 no.6:256
'62. (MIRA 15:5)

1. Panteleymonovskiy ogneupornyy zavod imeni K. Marksa.
(Power presses)

LITVINENKO, N. M.; SHEVCHUK, K. S.; VASILEVSKIY, N. M.

"The Problem of Extending the Effect of Penicillin on the organism," Voenno-Med. Zhur., No. 6, p. 29, 1955.

LITVINENKO, N.M.

KOROLEV, F.L., gvardii polkovnik meditsinskoy sluzhby; LITVINENKO, N.M.,
podpolkovnik meditsinskoy sluzhby; SHLYAKHOVOY, E.Ye., mayor
meditsinskoy sluzhby; NATSVLISHVILI, G.A., starshiy leytenant
meditsinskoy sluzhby.

Effect of necrectomy on the course of thermal burna; experimental
studies. Voen-med. zhur. no.2:23-27 F '56 (MLRA 10:5)
(BURNS, experimental,
eff. of nephrectomy) (Rus)
(KIDNEYS, effect of excision,
on exper. burns) (Rus)

LITVINENKO, N.M.

Ecology of the roller *Eurystomus orientalis* abundus Ripley. Zool.
zhur. 39 no.9:1403-1407 S '60. (MIRA 13:9)

1. Kharkov State University.
(Suputinka Preserve--Rollers (Birds))

LITVINENKO, O.K.

Use of calculating machines in differentiating local and regional
gravity anomalies. Prikl.geofiz. no.25:130-134 '60. (MIRA 13:6)
(Gravity) (Prospecting--Geophysical methods)

28202

S/194/61/000/005/021/078
D201/D303

9,7800

AUTHOR:

Litvinenko, O.K.

TITLE:

Preparing geophysical maps for their processing by high-speed electronic computers

PERIODICAL:

Referativnyy zhurnal. Avtomatika i radioelektronika, no. 5, 1961, 33 abstract 5 B233 (V sb. Razved. i promysl. geofiz., no. 37, M., 1960, 61-64) 41

TEXT: The application of the computer "Strela" at the MGU computer center for interpreting gravimetric and magnetic data over large areas is described. In preparing the map, a square grid is superimposed over it. Values of functions Δg and z , as obtained from observations, are noted at the grid corners. The second step is to determine the mathematical method of data processing. Every square with about 1000 points in it, has a respective matrix, containing the values of the initial function. The matrices are fed into the computer. Preparation of the map takes 2 - 3 man-days (scale

Card 1/2

LITVINENKO, O.K.

Determination of the structure of the Verkhoyansk fault
from gravity data. Geol. nefti i gaza 6 no.2:52-54 F #6?.
(MIRA 15:2)

1. Moskovskiy gosudarstvennyy universitet.
(Verkhoyansk Range Gravity prospecting)

LITVINENKO, O.K.; MAKAROV, V.A.

Using electronic machines to solve a direct problem of gravity prospecting for three-dimensional convex bodies (seismic structures). Prikl. geofiz. no.33:155-160 '62. (MIRA 15:10)
(Gravity prospecting) (Electronic calculating machines)

TYAPKIN, K.F.; GOLIZDRA, G.Ya.; KRAVCHENKO M.D., red.; LITVINENKO,
O.K., nauchn. red.

[Brief review of present-day methods for weakening the regional background level of gravitation and magnetic fields] Kratkii obzor sovremennykh metodov oslableniia regional'nogo fona gravitatsionnogo i magnitnogo polei. Moskva, Gos.geologich. kom-t SSSR, 1963. 49 p.

(MJRA 17:7)

LITVINENKO, O.K.; MELIKHOV, V.R.

Certain geological results of the interpretation of gravimetric
data on the southwestern portion of the Vilyuy trough. Geol.
nefti i gaza 8 no.8:29-33 Ag '64. (MIRA 17:8)

M. Moskovskiy gosudarstvennyy universitet.

ACG NR: AR6024839

SOURCE CODE: UR/0169/66/000/004/D014/D014

AUTHOR: Konstantinov, G. A.; Litvinenko, O.K.

TITLE: A computer technique for processing geophysical maps

SOURCE: Ref. zh. Geofizika, Abs. 4D90

REF SOURCE: Byul. nauchno-tekhn. inform. Gos. geol. kom-t SSSR. Otd. nauchno-tekhn. inform. VIEMSa, no. 2(55), 1965, 71-74

TOPIC TAGS: map, mapping, computer calculation, computer technique, geophysic map

ABSTRACT: The most rational data processing methods are presented which are essential because of limited immediate-access computer memories and because of the necessity to save machine time. Computing methods have been materially improved and radically altered in the recent years. A new computing method is described for effectively solving such problems as the division of gravitational fields. The following graphic problem is formulated: the values of a function in the nodes of a uniform network are given which represent the results of machine computation. By means of computer the values of isolines and their coordinates are to be found for a given intersection of the map and step between them. [Translation of abstract] L. Margevich

SUB CODE: 08, 09

Card 1/1

UDC: 528.94:550.3:681.177(004)

LITVINENKO, O.M. [Lytvynenko, O.M.], inzh.-mekhanik

Installing check forks on SGK-6V checkrow planters. Mekh. sil'.
hosp. [9] no.5:11-12 My '58. (MIRA 11:6)
(Planters (Agricultural machinery))

Litvinenko, O.N.

AUTHOR : Litvinenko, O.N.

TITLE : A-U Sci Conf dedicated to "Radio Day," Moscow, 20-25 May 1957.
"Use of Heterogenous Lines with Continuously Alternating Parameters'
for Pulse Shaping,"

PERIODICAL: Radiotekhnika i Elektronika, Vol. 2, No. 9, pp. 1221-1224,
1957, (USSR)

For abstract see L.G. Stolyarov.

30289

S/109/61/006/011/004/021
D266/D304

9,1400

AUTHOR: Litvinenko, O.N.

TITLE: Synthesizing the input impedance of non-uniform transmission lines if the frequency dependence is given in the form of a rational fraction

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 11, 1961 - 1825-1831

TEXT: The purpose of the paper is to determine the characteristic impedance of a non-uniform transmission line if the input impedance is specified as a function of frequency (given in the form of rational fractions). The author mentions Fel'dshteyn's method (Ref. 1: Radiotekhnika, 1958, 13, 8, 13) which can be used in the case of small reflections, and claims that his method is free of this restriction. The author starts the analysis by giving the transmission line equations for the voltage and current, introduces a transformation of the independent variable in the form

$$\tau = \int_0^x \sqrt{L(y) C(y)} dy$$

Card 1/43

30289

S/109/61/006/011/004/021
D266/D304

Synthesizing the input impedance ...

(x - distance along the line, L - inductance per unit distance, C - capacitance per unit distance) and finally obtains the following differential equation for the impedance Z

$$\frac{dZ}{d\tau} - p \frac{Z^2}{W} + pW = 0 \quad (1) \quad 4$$

(p = jω; ω - angular frequency). Since the Z(τ) function is unknown to start with, the author suggests a method which circumvents this difficulty. A recurrence relationship is introduced whereby the impedance of the k-1st class is related to the impedance of the kth class as follows

$$Z_k(\tau) = \rho_k(\tau) \left[\frac{Z_{k-1}(\tau)}{\rho_k(\tau)} + \frac{p}{a_k} \right] \left[1 + \frac{Z_{k-1}(\tau)}{\rho_k(\tau)} \frac{p}{a_k} \right]^{-1} \quad (2)$$

where a_k - constant, ρ_k - function of τ ; both a_k and ρ_k are independent of frequency. It may be noted that Z_k contains powers of p one degree higher than Z_{k-1} . Now if Z is given as a function of p

Card 2/43

30289

S/109/61/006/011/004/021
D266/D304

Synthesizing the input impedance ...

at $\tau = 0$ all the parameters $\rho_k(0)$, $\rho_{k-1}(0)$, ... and a_k , a_{k-1} , ... can be determined. The characteristic impedance of class k can be obtained by solving k differential equations. [Abstractor's note: Nothing is said about the solubility of these differential equations]. Carrying the analysis further the author justifies the choice of parameters. It turns out that a four-pole having a characteristic impedance ρ_k and propagation coefficient $g_k = \text{th}^{-1}(p/a_k)$ would transform Z_{k-1} into Z_k . Similar considerations apply if the non-uniform transmission line is terminated by an impedance Z_H at $\tau = t_3$. The equivalent circuit is presented in Fig. 2. The author claims that his method is rather general and could be successfully applied for the synthesis of networks with distributed parameters. There are 2 figures and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc.

SUBMITTED: March 1, 1961

Card 3/43

34043

S/109/62/007/001/022/027
D266/D301

9,1400

AUTHORS: Litvinenko, O.N., and Soshnikov, V.I.

TITLE: Synthesis of non-uniform transmission lines based on the solution of the inverse Sturm - Liouville problem

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 1, 1962, 169 - 170

TEXT: The purpose of the paper is to provide an exact method for determining the input impedance of a non-uniform transmission line. The problem can be written in the following form: Determine $\varphi(x)$ in the differential equation

$$u'' + [\lambda - \varphi(x)]u = 0 \quad (2)$$

for a given characteristic function $M(\lambda)$. The solution of this differential equation can be obtained as follows:

$$\varphi(x) = 2 \frac{dK(x, x)}{dx},$$

where $K(x, x)$ satisfies the integral equation

Card 1/3

Synthesis of non-uniform ...

34043
S/109/62/007/001/022/027
D266/D301

$$f(x, y) + \int_0^x K(x, s)f(s, y)ds + K(x, y) = 0, \quad (3)$$

$$x \geq y,$$

$$\text{where } f(x, y) = \int_{-\infty}^{\infty} \cos \sqrt{\lambda} x \cos \sqrt{\lambda} y [\sigma'(\lambda) - \frac{1}{\pi \sqrt{\lambda}}] d\lambda, \quad (4)$$

$$\text{and } \sigma'(\lambda) = \lim_{\delta \rightarrow 0} \lim_{\varepsilon \rightarrow 0} \frac{1}{\pi} \int_0^{\lambda+\delta} \text{Im } M(u + j\varepsilon) du. \quad (5)$$

This solution can be applied to the transmission line problem if

$$M(\lambda) = \frac{Z(p)}{p} \quad (6)$$

where $Z(p)$ - normalized input impedance of the non-uniform transmission line, $p = j\omega = -j\sqrt{\lambda}$, ω - angular frequency. The characteristic impedance is then given by the formula

Card 2/3

Synthesis of non-uniform ...

34043
S/109/62/007/001/022/027
D266/D301

$$W(x) = W(0)/[1 + \int_0^x K(x, s)ds]^2. \quad (7)$$

The method is illustrated by two examples. There are 10 references: 8 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: E.F. Bolinder, Proc. IRE, 1950, 38, 11, 1334.

SUBMITTED: June 19, 1961

4

Card 3/3

33791

S/108/62/017/002/006/010
D201/D305

9,3130 (1139)

AUTHOR: Litvinenko, O.N., Member of the Society (see Association)

TITLE: Pulse-forming by parabolic lines

PERIODICAL: Radiotekhnika, v. 17, no.2, 1962, 42 - 50

TEXT: From analysis of pulse forming properties of parabolic lines the author considers two methods of such pulse-forming. The first method assumes the line to represent a pulse-forming two-terminal network. It may be easily shown that the input impedance of the far end o.c. parabolic line is

$$Z = \frac{1}{p} \cdot \frac{W(0)}{\alpha} + W(0) \operatorname{cth} p t_d \quad (8)$$

where $W(0)$ - the characteristic impedance of the line at its input, α - parameter which characterizes the rate of change of the characteristic impedance of a capacitor $C_{eq} = \alpha/W(0)$ and the second - the input impedance of an o.c. at the far end homogeneous line. By

Card 1/4

33791

S/108/62/017/002/006/010
D201/D305

Pulse-forming by parabolic lines ...

choosing $a = -b < 0$ ($b > 0$) and by connecting in series with the line a capacitor $C_g = -C_{eq} = \frac{b}{W(0)} > 0$, a system is obtained which with a resistive load $R_L = W(0)$, will produce a rectangular pulse of duration $t_p = 2t_d$ and amplitude $U_L = E/2$. The charging voltage E will divide inversely proportional to the capacitance C_g and to the static capacitance of the line C_L , which from the point of view of insulation, constitutes an advantage compared with a section of homogeneous line. The second method which has the property of forming and transforming pulses, consists of joining two (or more) parabolic lines as shown in Fig. 3. If the coefficients of rate of change of both lines $a > 0$; $b > 0$, it is shown that for $a = b$ the circuit in Fig. 3 produces rectangular pulses. The pulse duration $t_p = 2t_{d1}$ is determined by the total delay time of the first line and is independent of the delay time t_{d2} of the second line, loaded with the resistive load R_L . R_L and C_g are chosen according to

Card 2/4

Pulse-forming by parabolic lines

33791
S/108/62/017/002/006/010
D201/D305

$$R_L = W_2(t_{d2}), \quad C_g = \frac{a + t_{d2}}{W_2(t_{d2})}, \quad (14)$$

in which $W_2(t_{d2}) = W(0)(1 + (t_{d2}/a))$. The source voltage E is divided here between static capacitances of both lines and the additional capacitance C_g , so that the voltage at each line never exceeds the value of E . It is also shown that the time delay of the second line determines the coefficient of utilization of the input voltage $K = U_I/E$ the max. value of K is obtained for $a = t_{d1}$ or

$$K_{\max} = 0.5(1 + \frac{t_{d2}}{t_{d1}}). \quad (18)$$

The circuits described with parabolic lines have the following advantages over homogeneous line pulse forming circuits: a) It is possible to obtain varying duration pulses; b) The electric strength of lines can be smaller; c) By using several lines, it is possible to obtain groups of pulses with given amplitudes and at given intervals. There are 5 figures and 2 Soviet-bloc references.

Card 3/4

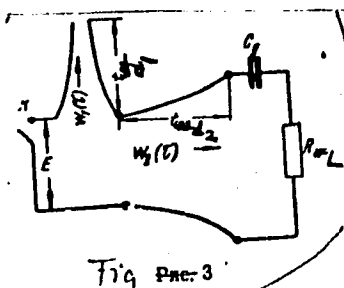
Pulse-forming by parabolic lines

S/108/62/017/002/006/010
D201/D305

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A.S. Popova (Scientific and Technical Society of Radio Engineering and Electrical Communications imeni A.S. Popov) [Abstractor's note: Name of Association taken from first page of journal]

SUBMITTED: February 10, 1961

Fig. 3.



Card 4/4

LITVINENKO, O.N.

Pulse shaping by parabolic lines. Radiotekhnika 17 no.2:42-50
F '62. (MIRA 15:2)

1. Deystvitel'nyy ohlen Nauchno-tekhnicheskogo obshchestva
radiotekhniki i elektrosvyazi imeni Popova.
(Pulse techniques(Electronics))(Electric networks)

S/108/62/017/009/001/003
D288/D308

9,1400

AUTHORS:

Litvinenko, O. N. and Soshnikov, V. I. Members
of the Society (see Association)

TITLE:

Synthesis of inhomogeneous lines by solving the
inverse Sturm-Liouville problem

PERIODICAL:

Radiotekhnika, v. 17, no. 9, 1962, 15 - 23

TEXT:

A brief review of the practical importance of inhomogeneous transmission lines and of previous investigations of the problem, is given. The authors employ a different approach, following Gel'fand and Levitan in solving the inverse Sturm-Liouville problem, which yields a general solution for the law of the changing transmission characteristic with a given input impedance, independent of the reflection coefficient at the input. The mathematical problem consists in determining the spectral function for a given input impedance, by considering the general case as a sum of two waves propagating in opposite directions. After a general analysis, the authors consider the synthesis

Card 1/2

LITVINENKO, Oleg Nikolayevich; SOSHIKOV, Viktor Ivanovich; POLYANSKAYA,
L.O., red.; MATUSEVICH, S.M., tekhn. red.

[Design of pulse-shaping lines] Raschet formirovushchikh liniy.
Kiev, Gostekhizdat, 1962. 113 p. (MIRA 15:10)
(Pulse circuits) (Pulse techniques (Electronics))

LITVINENKO, O.N.; SOSHNIKOV, V.I.

Synthesis of nonhomogenous lines using the solution of the
inverse problem of Sturm-Liouville. Radiotekhnika 17 no.9:
15-23 S '62. (MIRA 15:9)

1. Deystvitel'nyye chleny Nauchno-tekhnicheskogo obshchestva
radiotekhniki i elektrosvyazi imeni Popova.
(Microwaves) (Radio lines)

SREDNIY, Ivan Yevtikhiyevich, kand. tekhn. nauk; LITVINENKO, O.N.,
kand. tekhn. nauk, retsenzent; SKUBCHENKO, S.A., inzh.,
red. izd-va; BEREZOVYY, V.N., tekhn. red.

[Steady-state modes in linear and nonlinear networks
impulse analysis] Statsionarnye rezhimy v lineinykh i ne-
lineinykh tsepiakh; impul'snyi analiz. Kiev, Gostekhzdat,
USSR, 1963. 167 p. (MIRA 16:7)
(Electric networks) (Pulse circuits)

LITVINENKO, O.N.; SOSHNIKOV, V.I.

Reply to V.P. Torchigin's letter concerning the article
"Synthesis of nonuniform lines based on the solution of the
inverse problem of Sturm-Liouville." Radiotekh. i elektron.
8 no.11:1959-1960 N '63. (MIRA 17:1)

62009-55 EWT(1)/EEZ-4/EWA(h)

AM4043698

BOOK EXPLOITATION

UR/

621.372.061.5

20
B+1

Litvinenko, O. N.; Soshnikov, V. I.

The theory of heterogeneous lines and their use in radio engineering (*Teoriya neodnorodnykh liniy i ikh primeneniye v radiotekhnike*), Moscow, Izd-vo "Sovetskoye radio", 1964, 535 p. illus., biblio. 3,500 copies printed.

TOPIC TAGS: transmission line, pulse shape, radio engineering, mathematic matrix, delay circuit

PURPOSE AND COVERAGE: Nonuniform transmission lines are lines whose characteristic impedance changes along one coordinate. In accordance with the law of characteristic impedance change, nonuniform transmission lines can have the most diverse frequency characteristics. This accounts for their wide use in radio engineering. In the first part of the book the problem of synthesis of nonuniform transmission lines (determination of the law of characteristic impedance change according to the given frequency dependence of input impedance or the coefficient of transmission) is examined. The achieved results are used in the second part of the book which is concerned with the application

Card 1/3

L 64009-65

AM4043698

of nonuniform transmission lines in radio engineering. Here the uses of non-uniform transmission lines for pulse shaping and transformation for the matching of resistance and impedance are examined. The areas indicated do not encompass all of the possible applications of nonuniform transmission lines. The theory developed in the first part of the book makes it possible to produce a synthesis of nonuniform transmission lines which can be used as oscillators, matched filters, directional couplers, etc. The book is intended for radio engineering students of higher learning institutions.

TABLE OF CONTENTS (abridged):

Introduction -- 5

Ch. I. Simple nonuniform transmission lines -- 10

Ch. II. Solutions to equations for voltage and current of nonuniform transmission lines given in the form of power series -- 30

Ch. III. Input impedance of nonuniform transmission lines -- 43

Ch. IV. Linear-rational transformation of input impedance -- 67

Ch. V. Synthesis of nonuniform transmission lines according to input impedance and the coefficient of transmission in the form of a linear-rational

Card 2/3

L 64009-65
AM4043698

function of frequency -- 95

Ch. VI. Conditions necessary for the production of nonuniform transmission lines -- 140

Ch. VII. Synthesis of nonuniform transmission lines achieved by the solution of integral equations -- 147

Ch. VIII. Applying matrix methods of investigation to nonuniform transmission lines -- 243

Ch. IX. Approximate methods of investigating nonuniform transmission lines -- 263

Ch. X. Nonuniform transmission lines as two terminal networks -- 286

Ch. XI. Pulse transformation by nonuniform transmission lines -- 326

Ch. XII. Nonuniform transmission lines which can produce pulse shaping; and transformation -- 359

Ch. XIII. Calculation of delay circuits -- 371

Ch. XIV. Nonuniform transmission lines as ultrahigh frequency filters -- 427

Ch. XV. Nonuniform transmission lines for impedance matching -- 456

Bibliography -- 524

SUB CODES: EC, EE

SUBMITTED: 09Apr64

NO REF NOV: 068

OTHER: 087

Card 3/3 *llc*

KRIKSUNOV, Vladimir Grigor'yevich, kand. tekhn. nauk; LITVINENKO,
O.N., kand. tekhn. nauk, retsenzent

[Automatic analyzers of the spectra of electrical signals]
Avtomaticheskie analizatory spektrov elektricheskikh signa-
lov. Kiev, Tekhnika, 1965. 178 p. (MIRA 18:4)

LAZUTKIN, Ye.; LITVINENKO, P.

Latent possibilities to increase labor productivity on collective farms. Sots.trud 4 no.2:36-44 F '59. (MIRA 12:4)
(Farm mechanization)
(Collective farms)

LITVINENKO, P. (st.Yayva, Permskoy oblasti)

First successes. Okhr.truda i sots.strakh. no.7:50-51
J1 '59. (MIRA 12:11)

1. Predsedatel' rabochkoma profsoyuza Verkh-Yayvinskogo les-
promkhoza.

(Yayva--Medicine, Industrial)

LITVINENKO, Petr Antipovich; MASHKOV, A.N., red.; BRUSHEYN, A.I., red.
izd-va; EVENSON, I.M., tekhn.red.

[Organization of the industrial and technical training of workers]
Organizatsiia proizvodstvenno-tekhnicheskogo obucheniia rabochikh.
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi
metallurgii, 1960. 133 p. (MIRA 13:5)
(Technical education)

LITVINENKO, Petr Antipovich; GRUSHKO, G.F., nauchnyy red.; PROKOP'YEVA, L.G., red.; PEREDERYI, S.P., tekhn.red.

[Training of stokers of industrial and heating boiler rooms operating on gas fuel; a textbook on methods] Podgotovka kochegarov promyshlennykh i otopitel'nykh kotel'nykh, rabotaiushchikh na gazovom toplive; metodicheskoe posobie. Moskva, Vses.uchebno-pedagog.izd-vo Proftekhizdat, 1961. 199 p.

(MIRA 15:4)

(Boilers)

LITVINENKO, Petr Antipovich; DUBETS, S.G., nauchn. red.; PROKOF'YEVA,
L.G., red.; NESYSSLOVA, L.M., tekhn. red.

[Training of the operators of electric mine locomotives;
methodological textbook for instructors in industrial train-
ing in courses with work breaks] Podgotovka mashinistov
shakhtnykh elektrovozov; metodicheskoe posobie dlia in-
struktora proizvodstvennogo obucheniia na kursakh s otryvom
na proizvodstva. Moskva, Proftekhizdat, 1962. 89 p.
(MIRA 17:3)

LITVINENKO, Petr Antipovich

[Training stokers for industrial and heating boilers
operating on gas fuel; methods handbook] Podgotovka ko-
chegarov promyshlennykh i otopitel'nykh kotel'nykh, ra-
botaiushchikh na gazovom toplive; metodicheskoe posobie.
Izd.2., poerer. i dop. Moskva, Vysshaia shkola, 1964. 202 p.
(MIRA 17:9)

LITVINENKO, P.M.

Raw material divisions of sugar mills under new conditions.
Sakh.prom. 28 no.5:3-5 '54. (MLRA 7:9)

1. Timashevskiy sakharный kombinat.
(Sugar beets) (Sugar industry)

CA 12

Bactericidal activity of certain concentrations of acetic acid in meat preservation. I. M. Tsvung and P. M. Litvinenko. *Trudy nauch. issled. 1949, No. 6, 28.* Baking beef 5 min. in 10% AcOH is bactericidal not only in surface layers but also in the deeper layers, as the product does not spoil on air exposure for 10 or more days; use of 5% AcOH for 10 min. is less effective and decumpr. starts in 8 days. G. M. Kosolapoff

ASB-51.4 METALLURGICAL LITERATURE CLASSIFICATION

10	U	5	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
----	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CA

Acid-less determination of milk fat in milk products.
1. I. Tsvang and P. M. Lityinchenko. *Gigiena i Sanit.*
1950, No. 3, 51.—The method of Golgorakil and Kogan
is modified as follows: the butyrometer is charged with 9
ml. 10% Na_2CO_3 , then 3.5 ml. alc. mist. (1 AmOH to 6
EtOH), then 9 ml. milk; after heating on the water bath
and centrifuging, the results are calcd. as indicated earlier.
Deviations are within 0.1-0.3%. G. M. Kosolapoff

LITVINENKO, P. M.

2

Use of methyl orange in determination of residual chlorine in water. P. M. Litvinenko and V. S. Rozovskii. *Gigiena i Sanit.* 1954, No. 1, 52-53. In the usual iodometric detn. of Cl in water or that with methyl orange good agreement was found with the actual amounts of Cl added to the test solns. In the presence of chloramines, the methyl orange method gave results that are consistently below those found iodometrically, but these results checked very well the amount of free Cl. Thus the methyl orange method is specific for Cl and does not include the chloramine values. The methyl orange method has sensitivity of 0.02 mg./l. The procedure: to 100 ml. soln. add 2 drops 5N HCl and titrate with 0.005% methyl orange until a weak pink color appears; 1 ml. is equiv. to 0.00219 mg. Cl. G. M. K.

LITVINENKO, P.M., podpolkovnik meditsinskoy sluzhby; ALIKSANDROV, P.P.,
podpolkovnik

Keeping water in a hot climate. Voen.-med.zhur. no.7:38-39 J1 '57.
(WATER SUPPLY (MIRA 11:1)
preserv. of water in hot climate)
(CLIMATE, eff.
same)

LITVINENKO, P.^M, podpolkovnik med.sluzhby; ALEKSANDROV, P., podpolkovnik
^A

Water conservation in a hot climate. Voen.-inzh. zhur. 102 no.5:
38-39 My '58. (MIRA 11:6)

(Water conservation)

LETVINENKO, P.M., podpolkovnik meditsinskoy sluzhby; KHMILOV, A.V., podpolkovnik
meditsinskoy sluzhby; KURGUZOV, S.S., podpolkovnik meditsinskoy sluzh-
by [deceased]

Food poisoning caused by the Sonne bacillus. Voen. med. zhur.
no.4:23-25 Ap '59. (MIRA 12:8)

(SHIGELLA infections,
sonnei food pois. (Rus))
(FOOD POISONING, microbiol.
Shigella sonnei (Rus))

LITVINENKO, P.M., podpolkovnik meditsinskoy sluzhby

Experience with medical control of the water supply for the
troops in a hot climate. Voen.-med.zhur. no.7:56-59 J1 '59.
(MIRA. 12:11)

(WATER SUPPLY)
(TROPICAL CLIMATE)
(MILITARY HYGIENE)

LITVINENKO, P.M., podpolkovnik meditsinskoy sluzhby

Research and practice conference of physicians of the Turkestan
Military District. Voen.-med. zhur. no.11:96 N '61. (MIRA 15:6)
(MEDICINE, MILITARY)

L 29184-56 EWT(1)/EWT(m)/ETC(f)/EPF(n)-2/EWG(m) WW/RO

ACC NR: AP6018847

SOURCE CODE: UR/0242/65/0001/007/0057/0059

AUTHOR: Latvinenko, P. M.

ORG: Tashkent Medical Institute (Tashkentskiy meditsinskiy institut)

TITLE: Sanitary-hygienic evaluation of deactivation of water when filtered through ionites KU-1, EDE-10, sulfonated coal and carboferrogel-M

SOURCE: Meditsinskiy zhurnal Uzbekistana, no. 7, 1965, 57-59

TOPIC TAGS: radioactive contamination, ion exchange, coal, cobalt, radioisotope, nuclear decontamination, chemical agent filter, fresh water

ABSTRACT: The deactivation of ¹⁹water contaminated by radioactive substances by the method of filtration through filters containing ionites, sulfonated coal, and carboferrogel-M, that is, substances capable of adsorbing on their surface anions and cations including radioactive substances, is recommended. The excellent filtration properties of the substances were established in experiments in which water taken from the Surkhandar'ya river, and contaminated by radioactive cobalt was passed through the filters; contamination was affected with 200 microcurie grams per liter. The experiment established that: 1) water passed through filters containing ionites KU-1, EDE-10, sulfonated coal, and carboferrogel-M is purified and deactivated when contaminated with

Cord 1/2

L 29184-66

ACC NR: AP6018847

0

radioactive substances; 2) water containing large quantities of suspended substances should be coagulated prior to filtration and the coagulates allowed to settle; 3) water filtered and deactivated by the use of the ionites, sulfonated coal, and carboferrogel-M is fit for drinking and cooking purposes; 4) the filtration and ion exchange properties of the filtering media rapidly deteriorate, and, therefore, the filters must be changed frequently.

Orig. art. has: 1 table. [JPRS]

SUB CODE: 18, 07 / SUM DATE: 05Jul63 / ORIG REF: 006

Card 2/2

BLG

L 55388-65 BWP(a)/BWP(m)/BWP(t)/BWP(k)/BWP(z)/BWP(b) Pf-4 IJP(c) JD
 ACCESSION NO: AR5013014 UR/0137/65/000/004/1019/1019
 669.3:548.4

SOURCE: Ref. zh. Metallurgiya, Abu. 41118

AUTHOR: Aksenov, G. I.; Litvinenko, P. P.

TITLE: Investigation of the fine structure of reduced copper powder

CITED SOURCE: Tr. 7 Vses. nauchno-tekhn. konferentsii po poroshk. metallurgii.
 Yerevan, 1964, 25-30

TOPIC TAGS: powder metallurgy, copper, fine structure

TRANSLATION: The intragranular fine structure of Cu powder obtained by reduction from the oxide at 250, 350, 450 and 550°C was investigated. With increasing reduction temperature the size of blocks decreases and distortions of the second order are reduced, resulting in a lower potential energy of the system. With increasing reduction temperature the dislocation density falls from 6×10^{11} to $1.1 \times 10^{10} \text{ cm}^{-2}$ and the disorientation angle of mosaic blocks is reduced from 22' to 10'. V. Olonicheva.

Card 1/2

L-55888-65

ACCESSION NR: AR5013014

SUB CODE: MM

ENCL: 00

0

Card 2/2

L 8561-66 EWT(1)/EWT(m)/EWP(k)/EWP(z)/EWA(c)/EWP(b)/T/EWP(e)/EWP(t) IJP(c)

ACCESSION NR: AP5021188 J1

UR/0139/65/000/004/0182/0183

AUTHOR: Aksenov, G. I.; Litvinenko, P. P.

TITLE: The effect of defects in the crystal structure on the pressing and sintering of copper powder samples

SOURCE: IVUZ Fizika, no. 4, 1965, 182-183

TOPIC TAGS: copper, powder metal compaction, powder metal sintering, crystal structure, crystal defect, pressure effect, physical diffusion

ABSTRACT: Powdered copper oxide reduced at 250 and 550C with particle sizes of 58--75 μ was used to prepare the samples. Five grams of powder were used to press an annular sample with diameters of 20 x 13 mm and a height which depended on the applied pressure. The sintering was carried out in an atmosphere of dry, dissociated ammonia at 800, 900, and 1000C for various durations. The electrical resistivity of the samples was measured by a contactless method. The compressibility of the powder obtained at the lower reduction temperature was smaller than that of the powder obtained at the higher reduction temperature, in agreement with the defect density. It was found that the powder reduced at 250C had not only a high density of defects, but also a higher critical stress compared with the powder reduced at

Card 1/2

L 8561-66

ACCESSION NR: AP5021188

3

550C. The x-ray data indicated that at the chosen sintering temperatures micro-stresses of the second kind are relaxed and the mosaic blocks grow to dimensions which do not affect the physical width of the diffraction lines. The blocks grow as a function of the isothermal heating according to the parabolic law. The production of the blocks takes place therefore by diffusion. It is concluded that the dimensions of the blocks and the coefficients of self-diffusion are larger in the powder reduced at 250C. Orig. art. has: 2 figures, 2 formulas, and 1 table.

ASSOCIATION: Krybyshevskiy aviatсионnyy institut (Krybyshev Institute of Aviation)

SUBMITTED: 27 Jan 65

ENCL: 00

SUB CODE: SS, MM 4455

NR REF SOV: 014

OTHER: 000

jw

Card 2/2

AKSENOV, G.I.; LITVINENKO, P.P.

Studying the fine structure of a reduced copper powder in
pressed parts. Porosh.met. 5 no.12:1-7 D '65.

(MIRA 19:1)

1. Kuybyshevskiy aviatsionnyy institut. Submitted February 1,
1965.

L 07805-67 EWT(l)/EWP(e)/EWI(m)/EWP(t)/ETI/EWP(k) IJP(c) JD	
ACC NR: AR6017486	SOURCE CODE: UR/0137/66/000/001/G039/G039
AUTHOR: Aksenov, G. I.; Litvinenko, P. P.	
TITLE: Effect of oxide reduction conditions on the fine intergranular structure of reduced copper powder /	
SOURCE: Ref. Zh. Metallurgiya, Abs. 10301	34 2
REF SOURCE: Tr. Kuybyshevsk. aviats. in-T, vyp. 20, ch. 1, 1965, 179-186	
TOPIC TAGS: metal powder, copper, grain structure	
<p>ABSTRACT: The change in the fine structure of reduced copper powder was studied as a function of reduction temperature. The research was done on an x-ray ionization installation with automatic recording of the intensity distribution curve using copper K - radiation. The width of interference lines (111) and (222) was measured. An approximation method was used for determining the true width of the interference lines. A graphic method was used for isolating the contributions to line width made by block dimensions and microdistortions. As the reduction temperature is raised, there is an increase in the dimensions of the mosaic blocks and a reduction in microdistortions. The resultant data on block dimensions and microdistortions are used as a basis for calculating the dislocation density and angle of disorientation between adjacent mosaic blocks. The reduction in microdistortions is explained by a reduction in the potential energy of the system while the increase in the size of mosaic blocks is due to recrystallization. Bibliography of 11 titles. V. Yudin. [Translation of abstract]</p>	
SUB CODE; 20 11, 13	
Card 1/1 MC	UDC: 621.762.2.001:669.3

BRATSK, Z.S.; MITVINSKIY, Z.A.; SALDAN, F.S.

Solutions of acetic and chloracetic acids in dioxane. Urk.
khim. zhar. 27 no. 1:50-54 '61. (MITA 14:2)

1. Chernovitskiy gosudarstvennyy universitet, kafedra
fizicheskoy khimii.
(Acetic acid) (Dioxane)

KORETSKAYA, L.S.; KOVALEVSKAYA, A.N.; LEVINA, G.Ye.; LITVINENKO, R.M.

Peculiarities of colienteritis in Stalinabad and its relative weight in the sum total of acute intestinal diseases in children. Zdrav. Tadzh. 7 no. 2:32-37 Mr-Apr '60. (MIRA 13:10)

1. Iz Stalinabadskogo instituta epidemiologii i gigiyeny, Stalinabadskogo medinstituta im. Abuali ibni Sino i Detskoy infektsionnoy bol'nitsy.

(STALINABAD—INTESTINES—DISEASES)

LITVINENKO, R.M. [Lytvynenko, R.M.]

Materials on the study of peridiniaceous algae of the Ukrainian
S.S.R. Ukr. bot. zhur. 22 no.2:91-94 '65. (MIRA 18z4)

LITVINENKO, S. N.

"Study of Certain Biological Characteristics of Cornel (*Cornus mas* L.) and the
Manifestation of Its Best Forms under the Conditions of Kiev." Min Higher Education USSR,
Kiev State U imeni T. G. Shevchenko, Kiev, 1955
(Dissertation for the Degree of Candidate of Biological Sciences)

SO: Knizhnaya Letopis', No. 32, 6 Aug 55

USSR / Cultivated Plants. Fruit Trees. Small
Fruit Trees.

M-7

Abs Jour: Ref Zhur-Biol., 1958, No 16, 73148.

Author : Litvinenko, S. N.

Inst : Not given.

Title : Cultivation of Dogwood in Kiev.

Orig Pub: Sad i ogorod, 1958, No 3, 55-56.

Abstract: No abstract.

Card 1/1

LITVINENKO, S.N.

Fast propagation of cornelian-cherry dogwood by seeds. Trudy
Bot.sada AN URSR 5:57-65 '58. (MIRA 12:2)
(Dogwood)

LITVINENKO, S.M. [Lytvynenko, S.M.]

Some useful properties of cornelian-cherry dogwood. Visnyk Bot.
sada AN URSS no.1:45-47 '59. (MIRA 13:8)
(Ukraine--Dogwood)

30(1)

AUTHOR:

Litvinenko, S. N., Candidate of
~~Biological Sciences~~

SOV/30-59-1-11/57

TITLE:

Highly Active Growth Stimulator (Vysokoaktivnyy rostovyy
stimulyator)

PERIODICAL:

Vestnik Akademii nauk SSSR, 1959, Nr 1, pp 81-82 (USSR)

ABSTRACT:

N. A. Krasil'nikov, Corresponding Member, AS USSR, obtained and tested a preparation which is similar in its efficiency to gibberellinic acid (gibberellinovaya kislota) (Ref 1). V. I. Bilay, Institut mikrobiologii Akademii nauk USSR (Microbiological Institute, Academy of Sciences UkrSSR), as well as D. A. Verner, Candidate of Technical Sciences, Institut organicheskoy khimii Akademii nauk USSR (Institute of Organic Chemistry, AS UkrSSR) first obtained crystalline "gibberelline" (gibberellin) from different plants growing in the Ukraine. Its effect upon plants was tested in the Botanical Garden of the AS UkrSSR. In a short time the effect was noticeable, and after 28 days the test plant was blooming whereas the control plant was still very far behind (see figure). At present, the

Card 1/2

LITVINENKO, S.M. [~~Lytvynenko~~, S.M.]

Decorative wild plants of the Altai which might be used for
cultivation in Kiev. Trudy Bot.sada AN URSR 6:77-82 '59.
(MIRA 13:5)

(Altai Mountains--Plants, Ornamental)
(Kiev--Acclimatization(Plants))

LITVINENKO, S.M. [Lytvynenko, S.M.], kand.biol.nauk

Gibberelin. Nauka i zhyttia 9 no.3:50 Mr '59.

(MIRA 12:4)

(Gibberelins)

LITVINENKO, S.N.

Study of growth promoting substances - gibberellins. Bot. zhurn. 44
no.5:645-647 May '59. (MIL 10:11)

1. Botanicheskiy sad AN USSR, Kiev.
(Gibberellins)

17(3),30(1)

AUTHOR:

Litvinenko, S. N.

SOV/20-126-6-61/67

TITLE:

Ukrainian Gibberelline as an Effective Growth Stimulant (Ukrainian gibberellin - effektivnyy rostovyy stimulyator)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 6, pp 1368-1370 (USSR)

ABSTRACT:

The history of the discovery of gibberelline is recalled (Refs 1,2). Gibberellines have proved to be substances of high physiological activity (Reference 3 quotes more than 200 papers on this subject). Gibberellines of foreign origin are investigated in the USSR by a group of scientists headed by M. Kh. Chaylakhyan (Refs 4-6). A group of microbiologists and plant physiologists of the Akademiya nauk SSSR (Academy of Sciences of the USSR)(Refs 7,8) has developed and tested a preparation whose effect is similar to that of the gibberellines. In the Ukraine V. I. Bilay in Ki'yeu (1958)(Institut mikrobiologii = Institute of Microbiology) and D. A. Verner (Institut organicheskoy khimii = Institute of Organic Chemistry; both institutes of the Academy mentioned under Association) have for the first time produced crystalline gibberelline from domestic stems of *Fusarium moniliforme*. This gibberelline is

Card 1/3

Ukrainian Gibberelline as an Effective Growth
Stimulant

SOV/20-126-6-61/67

identical with the gibberelline of Stodola (Ref 2) which was proved chromatographically. The new product was tried out for the first time in summer 1958 in the gardens mentioned under Association in *Nicotiana odorata*, China aster (*Callistephus sinensis*), thick-stemmed gentian (*Gentiana crassicaulis*), *Limonium Girardianum*, maize "Uspekh", tomatoes "Mayak", privet (*Ligustrum vulgare*), and *Pyracantha coccinea*. Gibberelline was applied in a concentration of 0.0025 % according to the method of references 4-6. Already after the first week it was seen that most of the plants had outgrown the checking plants. Towards the end of the fourth week tobacco, asters, tomato plants which had been treated with gibberelline came into bloom, whereas the control plants were only in the rosette stage or had 5-6 leaves (Fig 1). A similar reaction was noticed in the case of other investigated plants such as privet (Fig 2). In the winter of 1958/59 investigations were carried out concerning the treatment with Ukrainian gibberelline of seeds of various types of trees which required a long period of stratification (3-4 months) for germination (after 12-14 months); seeds of the apple-tree (*Malus domestica*, Sargentii

Card 2/3

Ukrainian Gibberelline as an Effective Growth
Stimulant

SOV/20-126-6-61/67

Zumi), pear-tree (*Pyrus domestica*), cornel (*Cornus mas*), and edible mountain ash (*Sorbus domestica*) were soaked for 24 hours in a 0.02 % gibberelline solution (control plants 24 hours in water). The seeds of each of the 3 types of the apple-tree, pear-tree, and mountain ash germinated 6-7 days after sowing (Fig 3), cornel after 14-15 days. Control seeds did not germinate. The percentage of germination was in apples 62, pears 49, mountain ash 30, cornel 42. The precision index of the test was 18-20 %. Due to the high physiological activity of the new stimulant which was found by means of these initial tests, and the identification of its physico-chemical properties Ukrainian gibberelline was recommended for industrial production. There are 3 figures and 9 references, 6 of which are Soviet.

ASSOCIATION: Botanicheskiy sad Akademii nauk USSR (Botanical Garden of the Academy of Sciences of the UkrSSR)
PRESENTED: March 20, 1959, by A. L. Kursanov, Academician
SUBMITTED: March 17, 1959
Card 3/3

LITVINENKO, S.N.

Introduction of ornamental plants from the flora of the Altai.
Biul.Glav.bot.sada no.37:44-46 '60. (MIRA 13:11)

1. Botanicheskiy sad Akademii nauk Ukrainskoy SSR, Kiyev.
(Kiev--Plants, Ornamental) (Plant introduction)

LITVINENKO, S.N.

Rapid method of bioantographic manifestations of paper chromatograms in work with antibiotics. Lab. delo 8 no.10:49--51.
'62. (MIRA 17:4)

1. Laboratoriya khimicheskoy oobistki antibiotikov (zav. -
kand. biologicheskikh nauk S.N. Litvinenko) otdela antibiotikov (zav. - doktor biologicheskikh nauk A.B. Chernomordik) Kiyevskogo instituta epidemiologii i mikrobiologii.

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1,
p 171 (USSR) 15-57-1-1069

AUTHOR: Litvinenko, S. P.

TITLE: The Rate of Freezing and the Thermal Capacity of Some
Soils (Skorost' promerzaniya i teployemkost' neko-
torykh gruntov)

PERIODICAL: Fiz. sb. L'vovsk. un-t, 1955, Nr 1 (6), pp 22-34

ABSTRACT: The samples (cores) investigated were taken from the
following zones: 1) platy limestones, 2) light gray
dolomites, 3) calcareous marls, 4) upper argillaceous
dolomites, and 5) dolomites in the highly gypseous
zone. In determining the rate of freezing of the
ground, a relationship was established between changes
in temperature of freezing and length of time of
freezing. The author describes the arrangements for
determining the rate of freezing and for finding the

Card 1/2

15-57-1-1069

, The Rate of Freezing and the Thermal Capacity (Cont.)

thermal capacity. He reports the procedure and the results of the studies. The determinations of rate of freezing are given in graphic form, and the thermal-capacity data are shown in a table.

Card 2/2

A. M. Ch.

PONOMARENKO, A.A.; LITVINENKO, S.P.; SOLOV'YEVA, T.Ye.; CHUCHUPAI, V.D.

Chemiluminescence method for investigating the mixing and flow
of fluids. Dop. ta pov. L'viv. un. no.5 pt.2:88-89 '55.
(MLRA 9:10)

(Luminescence) (Hydrodynamics)